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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/579,973	05/26/2000	Paul Tat-Keung Ng	OMC1159.009	1021

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EXAMINER

DOLINAR, ANDREW M

ART UNIT	PAPER NUMBER
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3747

DATE MAILED: 12/20/2001

Please find below and/or attached an Office communication concerning this application or proceeding.

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# Office Action Summary

Application No.

09/579,973

Applicant(s)

NG, PAUL TAT-KEUNG

Examiner

Andrew M. Dolinar

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 18 October 2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-53 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 15-20 and 50-53 is/are allowed.
- 6) ☒ Claim(s) 1,2,6-14,21-24,26-37,40 and 46-49 is/are rejected.
- 7) ☒ Claim(s) 3-5,25,38,39 and 41-45 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)                      4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)                      5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_                      6) ☐ Other: \_\_\_\_\_

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## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 40, 42, 46 and 47 are rejected under 35 U.S.C. 102(e) as being anticipated by Koemer. The control unit determines direction of rotation and shuts down the engine upon detection of reverse rotation as disclosed at column 4, lines 24-66. It is implied that the engine is started before it is shut down.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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Claims 1, 7-14, 21-24 and 26-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krueger in view of Tobinaga et al. Krueger discloses an electronic engine control system for ignition and fuel injection in a rope-start engine without a battery which may be used in a snowmobile but does not determine reverse running and disable the firing sequence in a two stroke engine. Tobinaga et al teaches that it is known to determine reverse running and disable the firing sequence in a two stroke engine. Rotational position is determined as set forth at column 5, lines 56-61. Reverse running determination and disabling of the firing sequence is described at column 16, lines 23-43. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the electronic engine control system of Krueger for use in a two stroke engine and to include a reverse running disabling feature, as taught by Tobinaga et al, in order to provide an operative engine and to prevent damage to the engine. The resulting control system would inherently function as claimed.

Claims 1, 2, 6-14, 21, 22, 26-37, 48 and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koerner et al in view of Krueger. Koerner et al discloses the claimed invention except for the rope-start battery-less power supply arrangement and use in a snowmobile engine. The control unit determines direction of rotation and shuts down the engine upon detection of reverse rotation as disclosed at column 4, lines 24-66. Krueger teaches that it is known to power an engine control unit in a rope-start engine which may be used in a snowmobile from an alternator without a battery. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the engine controller of Koerner et al in combination with a rope-start engine which may be used in a snowmobile

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having a battery-less power supply, as taught by Krueger, in order to provide a small lightweight engine assembly. The resulting control system would inherently function as claimed.

***Allowable Subject Matter***

Claims 15-20 and 50-53 are allowed.

Claims 3-5, 25, 38, 39 and 41-45 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

Applicant's arguments have been fully considered but they are not persuasive insofar as they apply to the above grounds of rejection.

The strongest rationale for combining references is a recognition, expressly or impliedly in the prior art or drawn from a convincing line of reasoning based on established scientific principles or legal precedent, that some advantage or expected beneficial result would have been produced by their combination. *In re Semaker*, 702 F.2d 989, 994-95, 217 USPQ 1, 5-6 (Fed. Cir. 1983). In this case the examiner has established that there is an expected beneficial result from combining the teachings of the references as stated in the grounds of rejection. The test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

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Regarding the rejection of claims 1, 7-14, 21-24 and 26-35 under 35 U.S.C. 103(a) as being unpatentable over Krueger in view of Tubing et al, since the essential structural features are taught by the prior art, it is reasonable to expect that the claimed functions would be inherent. In the ignition control system of Tobinaga et al each cylinder has its own pulser coil. Therefore, the first detected signal would establish rotational position at less than one rotation with rotation direction being determined from subsequent signals. Claims 1, 21 and 34 lack sufficient detail to distinguish over this feature.

Where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a *prima facie* case of either anticipation or obviousness has been established. *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977). "When the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not." *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990). Therefore, the *prima facie* case can be rebutted by evidence showing that the prior art products do not necessarily possess the characteristics of the claimed product. *In re Best*, 562 F.2d at 1255, 195 USPQ at 433.

The arguments of counsel cannot take the place of evidence in the record. *In re Schulze*, 346 F.2d 600, 602, 145 USPQ 716, 718 (CCPA 1965); *In re Geisler*, 116 F.3d 1465, 43 USPQ2d 1362 (Fed. Cir. 1997) ("An assertion of what seems to follow from common experience is just attorney argument and not the kind of factual evidence that is required to rebut a *prima facie* case of obviousness."). See MPEP § 716.01(c) for examples of attorney statements which are not evidence and which must be supported by an appropriate affidavit or declaration.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew M. Dolinar whose telephone number is (703) 308-1948. The examiner can normally be reached on Mon. - Thu. (7:30-6:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene Mancene can be reached on (703) 308-2696. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9302 for regular communications and (703) 872-9303 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0861.



Andrew M. Dolinar  
Primary Examiner  
Art Unit 3747

AMD  
December 18, 2001